What is claimed is:

1. An ejector cycle comprising:

a compressor for compressing refrigerant;

a high-pressure heat exchanger for radiating heat of high-pressure refrigerant discharged from the compressor;

a low-pressure heat exchanger for evaporating low-pressure refrigerant after being decompressed;

an ejector including a nozzle for decompressing and expanding refrigerant flowing from the high-pressure heat exchanger by converting pressure energy of refrigerant to speed energy of the refrigerant, and a pressure-increasing portion that is disposed to increase a pressure of refrigerant by converting the speed energy of refrigerant to the pressure energy of refrigerant while mixing refrigerant injected from the nozzle and refrigerant sucked from the low-pressure heat exchanger; and

a gas-liquid separator for separating refrigerant from the ejector into gas refrigerant and liquid refrigerant, the gas-liquid separator having a gas refrigerant outlet coupled to a refrigerant suction side of the compressor, and a liquid refrigerant outlet coupled to a refrigerant inlet side of the low-pressure heat exchanger; and

a variable throttle disposed in a refrigerant passage between the high-pressure heat exchanger and the ejector, wherein the variable throttle has a throttle opening degree that is variable such that a refrigerant super-heating degree at a refrigerant outlet side of the low-pressure heat exchanger becomes in a predetermined range.

2. The ejector cycle according to claim 1, wherein the variable throttle is disposed to decompress high-pressure refrigerant from the high-pressure heat exchanger, to a gas-liquid two-phase state.

3. The ejector cycle according to claim 1, wherein,

the variable throttle is a mechanical expansion valve having a sensing portion for sensing the refrigerant super-heating degree at the refrigerant outlet side of the low-pressure heat exchanger, and

the variable throttle mechanically operates based on the refrigerant super-heating degree sensed by the sensing portion.

4. The ejector cycle according to claim 1, further comprising

a sensor for detecting the refrigerant super-heating degree at the refrigerant outlet side of the low-pressure heat exchanger, wherein the variable throttle is an electrical throttle that is electrically operated based on the refrigerant super-heating degree detected by the sensor.

5. The ejector cycle according to claim 1, wherein at least a part of the variable throttle is integrated with the ejector.

6. The ejector cycle according to claim 1, wherein the nozzle decompresses refrigerant after being decompressed in the variable

throttle.

7. An ejector cycle comprising:

a compressor for compressing refrigerant;

a high-pressure heat exchanger for radiating heat of high-pressure refrigerant discharged from the compressor;

a low-pressure heat exchanger for evaporating low-pressure refrigerant after being decompressed;

an ejector including a nozzle for decompressing and expanding refrigerant flowing from the high-pressure heat exchanger by converting pressure energy of refrigerant to speed energy of the refrigerant, and a pressure-increasing portion that is disposed to increase a pressure of refrigerant by converting the speed energy of refrigerant to the pressure energy of refrigerant while mixing refrigerant injected from the nozzle and refrigerant sucked from the low-pressure heat exchanger; and

a gas-liquid separator for separating refrigerant from the ejector into gas refrigerant and liquid refrigerant, the gas-liquid separator having a gas refrigerant outlet coupled to a refrigerant suction side of the compressor, and a liquid refrigerant outlet coupled to a refrigerant inlet side of the low-pressure heat exchanger; and

a variable throttle disposed in a refrigerant passage between the high-pressure heat exchanger and the ejector, wherein the variable throttle has a throttle opening degree that is variable such that a refrigerant super-heating degree at the refrigerant suction side of the compressor becomes in a predetermined range.

8. The ejector cycle according to claim 7, wherein the variable throttle is disposed to decompress high-pressure refrigerant from the high-pressure heat exchanger, to a gas-liquid two-phase state.

9. The ejector cycle according to claim 7, wherein,

the variable throttle is a mechanical expansion valve having a sensing portion for sensing the refrigerant super-heating degree at the refrigerant suction side of the compressor, and

the variable throttle mechanically operates based on the refrigerant super-heating degree sensed by the sensing portion.

10. The ejector cycle according to claim 7, further comprising

a sensor for detecting the refrigerant super-heating degree at the refrigerant suction side of the low-pressure heat exchanger, wherein the variable throttle is an electrical throttle that is electrically operated based on the refrigerant super-heating degree detected by the sensor.

11. The ejector cycle according to claim 7, wherein at least a part of the variable throttle is integrated with the ejector.

12. The ejector cycle according to claim 7, wherein the nozzle decompresses refrigerant after being decompressed in the variable throttle.